Range and Spaceport Science and Technology Workshop
Colorado Springs, CO - January 10-13, 2005

SCHEDULE		
Monday, January 10, 2005		**Room**
1:00 p.m. - 5:30 p.m.	**Air Force Meeting** - DoD, SETAs, FFRDCs, Chairs, and Sub-Group Chairs are invited to attend - AFSPC S&T Corporate Process (Lt Col Kyle Charles, HQ AFSPC/XPXT) - ARTWG/ASTWG brief (Mr. Darin Skelly, NASA KSC) - AFSPC/XPX: Launch Ranges and Spaceports in the Integrated Planning Process (Mr. Keith Messenger, HQ AFSPC/XPXK, Scitor) - Integrated Network Enhancelment Telemetry (iNET) (Mr. Darrell Ernst, MITRE) - Technology Overview (Dr. Anhtuan Ngo, AFRL/VACA; Lt Col Robert Johnson, AFRL/VACA)	Salon D
2:00 p.m. - 6:00 p.m.	Conference Registration	Pre-Assembly
7:00 p.m. - 9:00 p.m.	Welcome Reception (Free to Conference Participants)	Aspen Leaf

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SCHEDULE		
Tuesday, January 11, 2005		**Room**
7:30 a.m. - 8:00 a.m.	**Continental Breakfast & Conference Registration**	Pre-Assembly
8:00 a.m. - 8:05 a.m.	**Introduction**	
8:05 a.m. - 8:15 a.m.	**Conference Opening** Major General Roosevelt Mercer, Jr.; Director of Plans and Programs; HQ AFSPC/XP	Ballroom EFGH
8:15 a.m. - 9:25 a.m.	**ARTWG/ASTWG/FIRST Status and Way Ahead** Major Jennifer A. Draper; Chief, Science and Technology Integration and AFSPC Chair, Advanced Range Technology Working Group; HQ AFSPC/XPXT Mr. Darin Skelly; Chief (Acting), Strategic Technology Formulation Office and NASA Chair, Advanced Range Technology Working Group; NASA KSC Mr. Keith Britton; Chair, Advanced Spaceport Technology Working Group; Technology Formulation Office; NASA KSC	Ballroom EFGH
9:25 a.m. - 9:55 a.m.	**NASA Strategic Planning Efforts (APIO)** Mrs. Rita Willcoxon; Deputy Director of Spaceport Engineering and Technology; NASA Lead for Capability Roadmap Development; NASA KSC	Ballroom EFGH
9:55 a.m. - 10:25 a.m.	**Morning Break**	Pre-Assembly
10:30 a.m. - 12:00 p.m.	**Sub-Group Breakouts** Meet and greet, review technologies of interest to sub-group, ensure coverage of technology breakouts - Advanced Servicing (Mr. Kevin Ingoldsby, Booz-Allen-Hamilton) - Communication Architecture (Mr. Pradipta Shome, FAA AST) - Telemetry (Mr. Don Sather, Aerospace) - Decision Making Support (Mr. Keith Britton, NASA KSC) - Tracking and Surveillance (Mr. Barton Bull, NASA GSFC) - Inspection & System Verification (Mr. Cary Peaden, NASA KSC) - Transportation, Handling, and Assembly (Mr. Roelof Schuiling, NASA KSC) - Monitor, Command and Control (Mr. Rodney Davis, Command and Control Technologies, Corp.) - Planning, Documentation, Analysis, Scheduling, Coordination of Assets, and Learning (Ms. Mary Hall, NASA KSC)	Ballroom EFGH Ballroom EFGH Rockrimmon 1 Rockrimmon 2 Eagle's Nest 1 Eagle's Nest 2 Eagle's Nest 1 Aspen Leaf Eagle's Nest 2
12:00 p.m. - 1:00 p.m.	**Lunch Break**	Ballroom ABCD

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SCHEDULE		
Tuesday, January 11, 2005 (Continued)		**Room**

1:00 p.m. - 2:30 p.m.	**Space Standards Briefing & Discussion**
	- Mr. Adrian Hook; Chairman, US Technical Advisory Group and U.S. Representative to ISO/TC20/SC13,
	  Space Data and Information Transfer Systems
	- Mr. Fred Slane; President, Space Infrastructure, Inc. & Space Infrastructure Foundation, Inc.
	- Mr. Bob Durst; MITRE
	- Mr. Larry Schultz; Chairman, ISO/TC20/SC14, Operations and Ground Support; NASA KSC
	
	1. Organization of international and national space standards
	2. Space standards work items of interest:
	  - Space Link Services, Space Internetworking Services, Onboard Interfaces and
	    Spacecraft Control
	  - Spacecraft/Launch Vehicle Interfaces, Ground Systems and Support
	  - AIAA/ANSI Standards for Space
		Ballroom EFGH

2:30 p.m. - 2:45 p.m.	**Afternoon Break**	Pre-Assembly

2:45 p.m. - 4:45 p.m.	**Technology Breakouts I**
	
	1. Standards (Need Telecon) (See Above)
	2. Displays (Mr. Steve Skladanek, Lockheed Martin Space Systems Company)
	3. Distribution of High-rate Voice, Video, Data; Extracting Real-time Data Within Latency and Link
	  Margins (Mr. Erik Denson, NASA KSC)
	4. Execute Command and Control of Range Assets and Flight Vehicles
	  (2nd Lt Aaron Landenberger, ESC/ASIO)
	5. Autonomic Logistics: applying intelligent systems to logistics (Mr. Mike Callinan,
	  Lockheed Martin)
		Rockrimmon 1
		Ballroom EFGH
		Rockrimmon 2
		
		Eagle's Nest 1
		
		Eagle's Nest 2

4:45 p.m. - 5:15 p.m.	**Re-Group**	Ballroom EFGH
6:30 p.m. - 9:00 p.m.	**Dinner** 6:30 p.m. Social Hour 7:00 p.m. Dinner	Aspen Leaf

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SCHEDULE		
Wednesday, January 12, 2005		**Room**
7:30 a.m. - 8:00 a.m.	**Continental Breakfast & Conference Registration**	Pre-Assembly
8:00 a.m. - 8:15 a.m.	**Conference Schedule Overview**	Ballroom EFGH
8:15 a.m. - 9:15 a.m.	**Range Modernization Status and Schedule** Colonel Michael Coolidge; Deputy Materiel Wing Director; Satellite and Launch Control Systems Program Office; SMC/RN	Ballroom EFGH
9:15 a.m. - 9:45 a.m.	**Space and Air Traffic Management System (SATMS)** Ms. Shelia Helton-Ingram; Transportation System Analyst; Commercial Space Transportation; FAA/AST	Ballroom EFGH
9:45 a.m. - 10:00 a.m.	**Morning Break**	Pre-Assembly
10:00 a.m. - 12:00 p.m.	**Technology Breakouts II** 1. Modeling and Simulation (Mr. Cary Peaden, NASA KSC) 2. Error Correction and Object Recognition (Dr. Jim Simpson, NASA KSC) 3. Nanotechnologies (Mr. Dennis Lobmeyer, NASA KSC) 4. Commerce Development (Ms. Mary Hall, NASA KSC)	Rockrimmon 1 Rockrimmon 2 Eagle's Nest 1 Eagle's Nest 2
12:00 p.m. - 1:00 p.m.	**Lunch Break**	Ballroom ABCD
1:00 p.m. - 2:45 p.m.	**Technology Breakouts III** 1. Data Handling: data fusion, extraction, and faster computing (Mr. Bob Ferrell, NASA KSC) 2. Space Tourism Development, Community and Education Outreach (Mr. Keith Britton, NASA KSC and Mr. Tim Huddleston, Aerospace Development Center) 3. Clean Room Technologies (Mr. Darin Skelly, NASA KSC) 4. Antenna Technology (Mr. Wayne Powell, NASA/WFF)	Rockrimmon 1 Rockrimmon 2 Eagle's Nest 1 Eagle's Nest 2
2:45 p.m. - 3:00 p.m.	**Afternoon Break**	Pre-Assembly
3:00 p.m. - 5:00 p.m.	**Technology Breakouts IV** 1. Scheduling (Mr. Darin Skelly, NASA KSC) 2. Data Processing (Mr. Guy Bedette, NASA KSC) 3. Spaceport Transformational Era Needs (Near Term) (Mr. Barton Bull, NASA GSFC) 4. Documentation and Learning: AI, machine learning, knowledge capture (Mr. Bob Ferrell, NASA KSC) 5. Spaceport and Range Security Technologies (Mr. Hal Cornelius, ECR - NAWC-WD, Titan Systems)	Ballroom EFGH Rockrimmon 1 Rockrimmon 2 Eagle's Nest 1 Eagle's Nest 2
5:00 p.m. - 5:15 p.m.	**Re-Group**	Ballroom EFGH

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SCHEDULE		
Thursday, January 13, 2005		**Room**
7:30 a.m. - 8:00 a.m.	**Continental Breakfast**	Pre-Assembly
8:00 a.m. - 8:15 a.m.	**Conference Schedule Overview**	Ballroom EFGH
8:15 a.m. - 9:00 a.m.	**National Space Transportation Policy** Maj Jennifer Draper; Chief, Science and Technology Integration; HQ AFSPC/XPXT	Ballroom EFGH
9:00 a.m. - 9:45 a.m.	**Autonomous Flight Safety System and Low Cost TDRSS Transponder** Mr. Barton Bull; Range and Mission Management Organization Office; Wallops Flight Facility; NASA GSFC	Ballroom EFGH
9:45 a.m. - 10:00 a.m.	**Morning Break**	Pre-Assembly
10:00 a.m. - 12:00 p.m.	**Technology Breakouts V** 1. Integrated Health Management (Mr. Payl Mackey, NASA KSC) 2. Space Cargo Technologies (Mr. Roelof Schuiling, NASA KSC) 3. Inspection and Checkout Technologies (Dr. David Bartine, NASA KSC) 4. Robotic/Automated System Technologies (Mr. Dennis Lobmeyer, NASA KSC)	Rockrimmon 1 Rockrimmon 2 Eagle's Nest 1 Eagle's Nest 2
12:00 p.m. - 1:00 p.m.	**Lunch Break**	Ballroom ABCD
1:15 p.m. - 2:30 p.m.	**Sub-Group Re-Group** Review technology roadmaps, determine if update is necessary, assess completeness of coverage - Advanced Servicing (Mr. Kevin Ingoldsby, Booz-Allen-Hamilton) - Communication Architecture (Mr. Pradipta Shome, FAA AST) - Telemetry (Mr. Don Sather, Aerospace) - Decision Making Support (Mr. Keith Britton, NASA KSC) - Tracking and Surveillance (Mr. Barton Bull, NASA GSFC) - Inspection & System Verification (Mr. Cary Peaden, NASA KSC) - Transportation, Handling, and Assembly (Mr. Roelof Schuiling, NASA KSC) - Monitor, Command and Control (Mr. Rodney Davis, Command and Control Technologies, Corp.) - Planning, Documentation, Analysis, Scheduling, Coordination of Assets, and Learning (Ms. Mary Hall, NASA KSC)	Ballroom EFGH Ballroom EFGH Rockrimmon 1 Rockrimmon 2 Eagle's Nest 1 Eagle's Nest 2 Eagle's Nest 1 Ballroom ABCD Eagle's Nest 2
2:30 p.m. - 2:45 p.m.	**Afternoon Break**	Pre-Assembly
2:40 p.m. - 4:40 p.m.	**Sub-Group Reports** (10 minutes each group)	Ballroom EFGH
4:40 p.m. - 5:00 p.m.	**Closing**	Ballroom EFGH